

Work Order ID 53393

November 03, 2009 11:41:53 AM



Page 1

Item ID: D4010-1

Accept



Setup Start



Revision ID: *PRELIM 09.11.03*

Item Name: Bearpaw

Stop



Start Date: 11/3/2009 Start Qty: 2.00



Cust Item ID:

Required Date: 11/4/2009 Req'd Qty: 2.00



Customer:

PRELIMINARY ISSUE

Reference:

Run Start



Approvals: Process Plan: *MF*

Date: *09-11-03*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4010	B-PRELIM

100

0.00



HAND FINISHING THERMOFORMING

M112988

Thermoform

Memo

0.00

Thermoforming Machine

Cut Blanks to fit frame size

BB 09/11/03
X2

110

0.00



THERMOFORMING MACHINE

Thermoform

Memo

0.00

Thermoforming Machine

Thermoform as per Dwg. D4010-1 and Folio D4010-1 temp using tool DT 9540 □ Dwg. Rev. *B* □ Folio Rev. *A*

BB 09/11/03
X2

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

Visually inspect for proper formation of each part

BB 09/11/03
X2

**ENGINEERING
APPROVAL**

[Signature]

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 53393

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Item ID: D4010-1

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Item Name: Bearpaw

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Cust Item ID:

Required Date: 11/4/2009 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

x2 _____ Dk 09/11/03

140

HAND FINISHING THERMOFORMING

0.00



Thermoform

Memo

0.00

Thermoforming Machine

Trim to Finished Dimensions as per dwg D4010-1

x2 _____ Dk 09/11/03

150

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

Check dimensions to ensure conformity to drawing tolerances.

x2 _____ Dk 09/11/03

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 53393

November 03, 2009 11:41:53 AM



Page 3

Item ID: D4010-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Bearpaw

Start Date: 11/3/2009 Start Qty: 2.00



Cust Item ID:

Required Date: 11/4/2009 Req'd Qty: 2.00

Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

**ENGINEERING
APPROVAL**

0.00

Quality Control

170

Identify as per dwg & Stock Location: _____

0.00



Packaging

Memo

0.00

Packaging

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

~~POSITIVE RECALL~~

~~EFFECTIVE~~ AUTH _____

~~RELEASED~~ DATE _____

SENT TO CALGARY

FOR FLIGHT TESTING PURPOSES.

BEARPAWS RETURNED TO DART HAWKESBURY
+ IDENTIFIED "FOR ENG. USE ONLY".

05.11.27.

09.11.03 Prototype

RDO324ADEC

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November 03, 2009 11:41:52 AM

Page 1

Work Order ID: 53393



Parent Item: D4010-1



Parent Item Name: Bearpaw

Start Date: 11/3/2009

Required Date: 11/4/2009

Comments: IPP Rev B 09/11/03 Drawing changed to accomidate OEM and Dart Skidtube.
DL. Verified by:DD.

Start Qty: 2.00

Required Qty: 2.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

M-ALXTRAB-S.300

Purchased

No

100

sf

0.0000

22.4547



Alextra ET 0.300 sheet



M 112988

PTD. →

DL 09/11/03.

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
09/11/03	100	USE ALEXTRA. ORANGE 0.300" instead of. ALEXTRA BLACK.	Dr.	09/11/03	2		

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 53393
Description:	Part Number: D 4010-1
Inspection Dwg: D 4010 Rev: B PRELIMINARY	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than <u>N/A</u> "				
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: <u>BB</u>	Date: <u>09/11/03</u>
------------------------	-----------------------

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
<u>24.62</u>	<u>± .25"</u>	<u>24.560"</u>	✓			
<u>12.00</u>	<u>± .25"</u>	<u>11.875"</u>	✓			
<u>2.37</u>	<u>± .250"</u>	<u>2.2"</u>	✓			
<u>1.25</u>	<u>± .13</u>	<u>1.283</u>	✓			
<u>0.10"</u>	<u>± .030"</u>	<u>.08"</u>	✓			
<u>1.0"</u>	<u>± .100"</u>	<u>1.058"</u>	✓			
<u>0.63"</u>	<u>± .030"</u>	<u>.648</u>	✓			
<u>0.185"</u>	<u>M.I.N.</u>	<u>0.230"</u>	✓			

Measured by: <u>Wh</u>	Date: <u>09/14/03</u>
Audited by: <u>S</u>	Date: <u>09/11/03</u>
Prototype Approval: <u>[Signature]</u>	Date: <u>09/11/03</u>

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/DL	

DART AEROSPACE LTD		Work Order: 53393
Description:		Part Number: D4010-1
Inspection Dwg: D4010	Rev: B PRELIM	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than _____"				
Shape Definition				
Texture Retention				
Material imperfections such as bumps, cracks, voids, scratching				

Measured by: _____ Date: _____

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
2.125	± 0.010	2.125	✓			
5.47	± 0.030	5.47	✓			
9.22	± 0.030	9.316		✓		
11.78	± 0.030	11.800	✓			
12.84	± 0.030	12.812	✓			
16.65	± 0.030	16.625	✓			
20.90	± 0.030	20.900	✓			
23.40	± 0.030	23.470		✓		
Ø .410"	± .006	.413	✓			
Ø .375"	± .006	.375	✓			

Measured by: _____ Date: 09/11/03

Audited by: _____ Date: 09/11/03

Prototype Approval: _____ Date: 09/11/03

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/DL	

Receiving Report

Date:

9/10/23

Batch No:

17112988

Supplier:

SABIC

Dart P/O:

10477

Packing Slip:

Yes

☒

No

Invoice:

Yes

☐

No

Receipt:

Cash

☐

Cr

☒

Release Note Attached:

Yes

☒

No

N/A

Waybill Attached:

Yes

☒

No

N/A

Shipment Complete:

Yes

☒

No

N/A

QC6 Inspection

☒

N/A

Work Order

☐

N/A

Discrepancies

Part Number	Description	Quantity Ordered	Quantity Received	Quantity Returned	Quantity Short	Comments

Initials of receiver (if shipment OK) Level 12

Production/Admin:

Date

Received/Costing

Initial

9/10/23

[Signature]

Location

H:\FORMS\Purchasing\approved purch\RECREPORT Rev D

02

1

0

1 EA

0000005

THANK YOU FOR SELECTING
SABIC POLYMERSHAPES

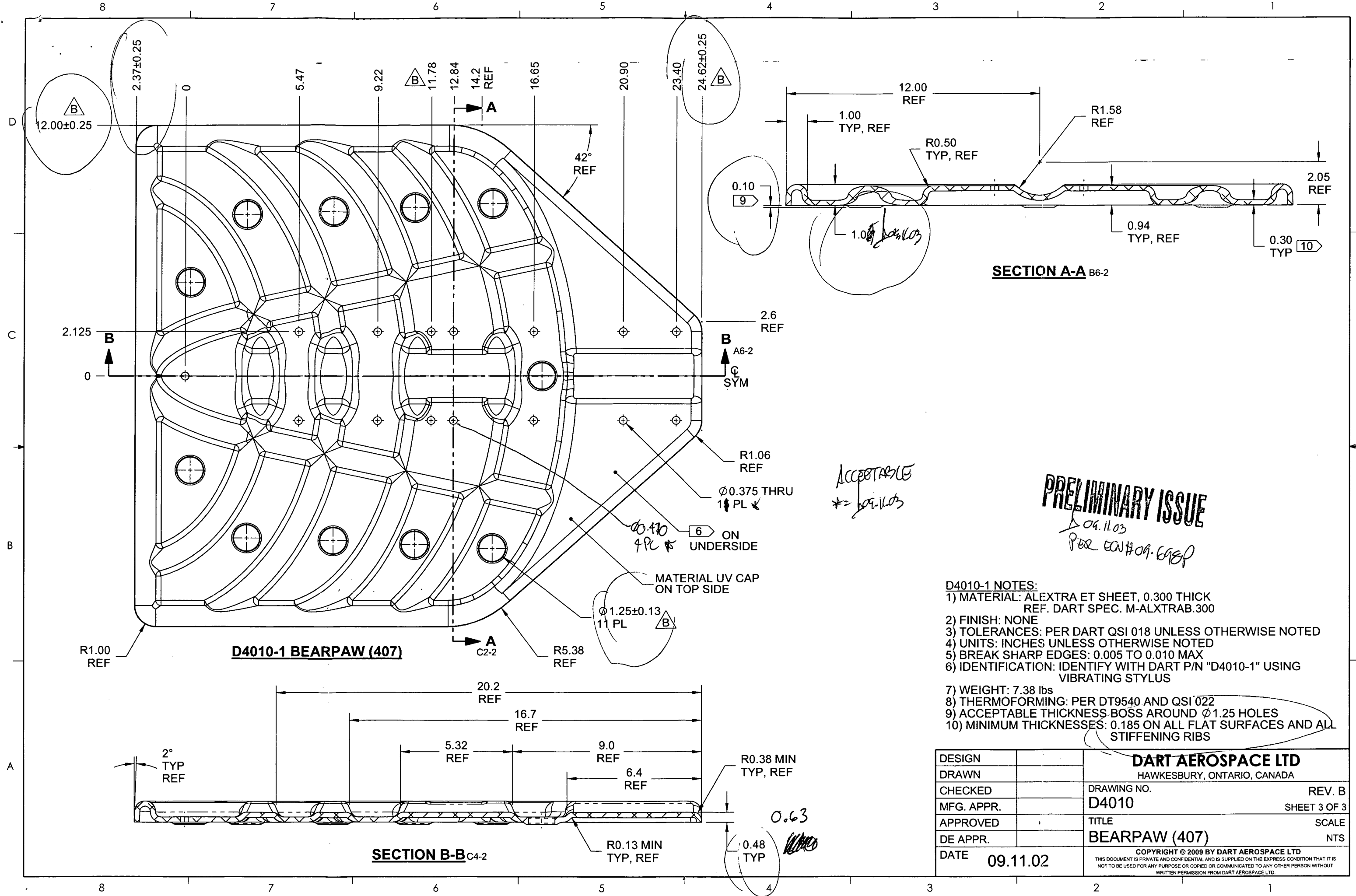
Corc

Remove SHIPPING
CHARGE

Ale D...

LINE NO.	RECEIVING NO.	PICKED BY	DATE	SHIPPED BY	DATE	VERIFIED	DATE
					27/1/24		

GOODS TO BE RETURNED WITHOUT APPROVAL FROM SABIC. ALL DISCREPANCIES MUST BE REPORTED WITHIN 10 DAYS.
1. RETURNS MUST HAVE VALID RETURNED GOODS AUTHORIZATION NUMBER CLEARLY MARKED ON ALL PACKAGES.





Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO10477**

Purchase Order Date 9/28/09

PO Print Date 9/28/09

Page Number 1 of 1

Order From :

VC-GEP001

SABIC POLYMERSHAPES
9150 AIRPORT ROAD
BRAMPTON, ON L6S 6G1
CA

FAXED
08/16/09

Contact Name

Vendor Phone

800 267 1575

Vendor Fax

613 745 4291

Vendor Account Nbr

Buyer

Requisition Nbr

Tax Resale Nbr

10127-2607

Terms

Net 30

Currency

CAD

FOB

Ship To :

DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Extended Price
1		Alextra (orange) 0.300" x 48" x 99"	10/13/09 Yes	8.00 Each	✓	\$522.0600	\$4,176.48

Deliver To: DARYL

P 9/14/23

PO Total:

\$4,176.48

**MATERIAL CERTIFICATION
REQ'D UPON DELIVERY**

Change Nbr: 2

Change Date: 9/28/09

CL
W

No substitution or deviation without
consent.
Certificate of Conformity or Material
Certification required when applicable

SABIC
Innovative
Plastics

سابك
sabic

SABIC Polymershapes

1250 OLD INNES RD. 519 OTTAWA, ONT. K1B 5L3
TEL: 613 745 7043 FAX: 613 745 8163

CERTIFICATE OF COMPLIANCE

SOLD TO: DART AEROSPACE

DATE: 10/23/2009

YOUR PURCHASE ORDER : 10477

OUR SHIPPER NO: 088433

LINE ITEM #: 1

QUANTITY: 8

8 or 10/26

DESCRIPTION: ALEXTRA ET3 ORANGE .300 X 48 X 96

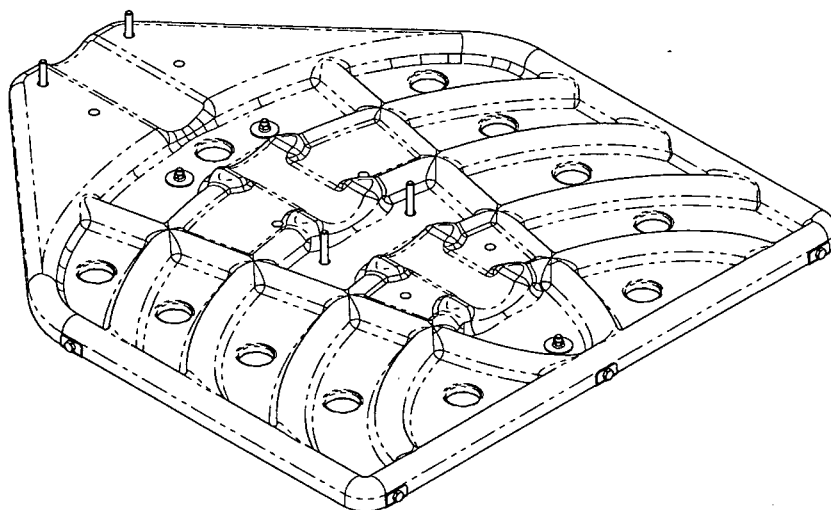
THESE PARTS WERE MANUFACTURED IN ACCORDANCE WITH: FAR 25.853

THIS IS TO CERTIFY THAT THE MATERIAL FINISHES AND FUNCTIONAL REQUIREMENTS OF THE ABOVE LISTED PARTS ARE IN ACCORDANCE WITH THE REFERENCE PROCUREMENT SPECIFICATIONS, CONTROL DRAWINGS OR PARTS DESIGNATION AND LATEST REVISIONS AS REFERENCED ON THE SUBJECT PURCHASE ORDER.

AUTHORIZED REPRESENTATIVE SIGNATURE

Jon Caldwell

JON CALDWELL
BRANCH MANAGER



D4010-041 BEARPAW ASSEMBLY (407)

53393

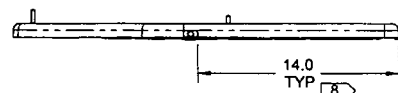
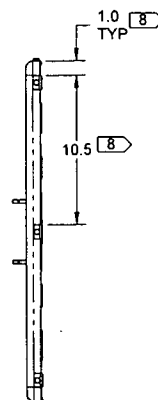
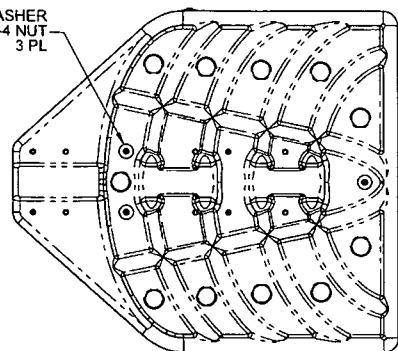
RELEASED
2009-11-21
MB

C	OPTIMIZED DESIGN BASED ON FUNCTIONALITY AND TO EASE MANUFACTURING	MB	09.11.10
B	REDESIGNED; ADDED PROVISIONS FOR COMPATIBILITY WITH OEM SKIDTUBES/SADDLES; REDEFINED SOME TOLERANCE	MB	09.11.02
A	NEW ISSUE	MB	09.10.22
REV.	DESCRIPTION	BY	DATE
DESIGN	JLB		
DRAWN	JLB		
CHECKED	FJS		
MFG. APPR.	N		
APPROVED	MB		
DE APPR.	MB		
DATE	09.11.10		

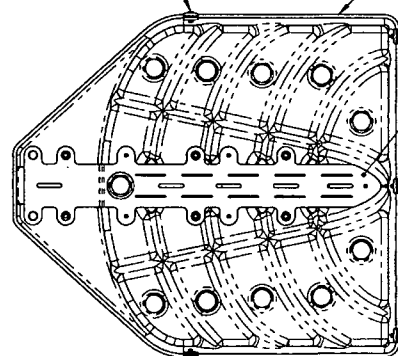
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWING NO. D4010	REV. C
TITLE BEARPAW (407)	SCALE NTS

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D3456-1 WASHER
MS21043-4 NUT
3 PL



AN3C5A BOLT
D4015-041 WEARBAR
MS21043-3 NUT



D4010-1
BEARPAW

AN3C5A BOLT
D4015-041 WEARBAR
MS21043-3 NUT

D4013-041 WEARPLATE
ASSEMBLY

AN3C5A BOLT
D4015-041 WEARBAR
MS21043-3 NUT

AN3C5A BOLT
D4015-041 WEARBAR
MS21043-3 NUT

AN3C5A BOLT
D4015-041 WEARBAR
MS21043-3 NUT

D4010-041 BEARPAW ASSEMBLY (407)

ITEM	QTY -041	P/N	DESCRIPTION
1	X	D4010-041	BEARPAW ASSEMBLY (407)
3	3	D3456-1	WASHER
4	1	D4010-1	BEARPAW
5	1	D4013-041	WEARPLATE ASSEMBLY
6	5	D4015-041	WEARBAR
21	5	AN3C5A	BOLT
22	5	MS21043-3	NUT
23	3	MS21043-4	NUT

D4010-041 NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 9.41 lbs
- 8) LOCATE D4015-041 (ITEM 5) AS SHOWN AND TRANSFER DRILL Ø0.191" HOLE FROM D4015-041 TO D4010-1 BEARPAW AND FASTEN USING PRESCRIBED HARDWARE.
- 9) TORQUE: AN3 NUTS = 15-20 in-lb
AN4 NUTS = 50-70 in-lb

DESIGN	18	DART AEROSPACE LTD	
DRAWN	18	HAWKESBURY, ONTARIO, CANADA	
CHECKED	18	DRAWING NO. D4010	REV. C
MFG. APPR.	18	TITLE	SHEET 2 OF 3
APPROVED	18	BEARPAW (407)	SCALE
DE APPR.	18		NTS
DATE	09.11.10	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED
2009-11-24

